1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

782 while the people are moving from place to place, or during a fair, the blood is sprinkled in all directions. The antlers of the sacrificial reindeer are hung on a bush or on rods. In spring, when the reindeer have no antlers, the sincipital bone is hung up; and when fawns have been sacrificed, their entire heads are displayed (Plate XI, Fig. 1; see also Plate IX, Fig. 2). At the Koryak fair on the Palpal Ridge I noticed that the fœtuses taken out of the wombs of slaughtered does were offered to the owner of the place. In order to deceive the deity, they were held just as though they were alive, and stabbed with a spear; and to simulate their death-agony, the fawns were shaken about. Frequently wooden or snow images of reindeer are thus offered as substitutes for real sacrifices.

The Reindeer Koryak make dog-offerings mainly to the kalau; and the stabbed dogs are placed on the ground with muzzle pointing westward, or in the direction in which the people are going to travel, that the evil spirits may cause them no harm.

Substitutes for the real animals are sacrificed when reindeer can ill be spared. This substitute must not be considered entirely as an imposition on the deity. The faith in the existence of a vital principle, and of its power to manifest itself in any object of animal form, is so strong, that the substitution is largely a self-deception. According to Tale 94, the Supreme Being discovers that a sacrifice has been offered to it, only when the sacrifice, or, rather, the soul of the sacrifice, rises to heaven. The Supreme Being hears a noise outside, sends out his son, Cloud-Man, to look; and the latter returns, saying that the white reindeer of Big-Raven, that is, the white reindeer sacrificed by Big-Raven, have come.

The offering of a reindeer as a sacrifice practically differs in no way from the mere slaughtering of a reindeer. The person who offers the sacrifice eats the meat, and thus sustains no loss. But it is different with a dog-offering, [435] which entails a loss on the owner. The only useful article that he obtains through the sacrifice of the dog is the skin, which is used for clothes; but the value of a dog-skin is less than one-tenth that of the dog. I paid two rubles for an entire suit made of dog-skin, while a dog of average value costs ten rubles.

The cult of the Maritime Koryak involves considerable expense. From fall until spring they kill so many pups and grown dogs that they are unable to replenish their teams from natural increase; and as soon as winter travel begins, they are compelled to buy driving-dogs in the Russian settlements. The following incident will give an idea of the number of dogs sacrificed annually by the Maritime Koryak. In the month of March I rented twenty sledges in Paren for the purpose of carrying my collection to the mouth of the Gishiga River. A month later I again passed through Paren, and was surprised at the number of dog-sacrifices which I found hanging there. All

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

233 her own fawn. Most of the fawns, but recently born (in fact, only one or two days old), were already running about with their mothers, who would run off at every attempt on my part to approach them. In a Yakut herd on the Lena River (1897), I could easily catch the little fawns, since their mothers were not afraid of people.

Almost all the fawns of the Koryak herd mentioned here were of a black or dark-brown color. Of the total number of almost five hundred fawns, I saw but ten or twelve pure white ones, and approximately the same number of dappled ones. I spent about two hours with the herd, during which time two does gave birth to their young. One of them, together with its new-born fawn, is shown on Plate xxv, Fig. 2. I took her picture during delivery, before the appearance of the placenta, when she was lying quiet.

The reindeer does produce young once a year. Not more than two or three barren females can be found in a large herd. When the weather is favorable in the spring, but few of the new-born fawns perish, usually from ten to fifteen per cent; but when the nights are cold, especially if there are snow-storms, many of them freeze to death. In a bleak spring the loss of fawns sometimes reaches as high as thirty per cent or more. On cold nights the Yakut reindeer-breeders place the does with their young in the long sheds described above, which diminishes the mortality of the fawns.

234 171 As a rule, the Koryak do not milk the does. Only on rare occasions, in the entire absence of food on the tundra, and when they do not like to kill the reindeer, do the herdsmen make use of reindeer-milk. The Koryak doe will not allow herself to be milked. The herdsmen throw her down on the ground, and suck the milk from the udder, like fawns. Some Koryak in close proximity to the Tungus have learned to milk the does. The Tungus are very fond of reindeer-milk, and drink it with tea. The milking is done by the Tungus as follows: —

A few men capture the doe and let the fawn come up to her, then suddenly pull it away from the udder, and draw the milk into a wooden basin. Not more than about three cups of milk can be obtained from a doe in a day. The milk is thick, very fat, and sickish to the taste. I thought its flavor resembled that of sheep's milk. The milking of the doe, of course, affects unfavorably the growth of the fawns. The Yakut do not milk their does, and that is one reason why the Yakut reindeer are taller and stronger than those of the Tungus.

435 The value of a Tungus, and especially of a Yakut, herd, is considerably higher than that of a Koryak-Chukchee herd. The price of a Koryak reindeer sold for slaughter varies from two to five rubles. The Russians usually buy slaughtered reindeer from the Koryak for from two to four bricks of tea per head. When buying slaughtered reindeer from the Koryak for food, I generally paid six bricks of tea, which was considered an unusually high price.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

A brick of tea[1] is sold at Gishiginsk (the centre of Russian trade) for fifty kopeks (about twenty-five cents); but, as the distance into the interior from that point increases, the price rises, until it reaches a ruble or more. 435

I have already stated that the Koryak do not sell their reindeer alive, especially the driving or breeding bucks; but they exchange them for other reindeer. A good Tungus driving-reindeer is usually worth two Koryak reindeer. The Tungus seldom sell their reindeer for slaughter. On my trip from the district of Gishiginsk to the Kolyma River, I bought on the Varkhalam River, in the camp of Abraham, the Tungus I mentioned before, a few reindeer for provisions on the way, and took them along with me. I paid six rubles per reindeer. A good Tungus riding-reindeer is valued at ten rubles. In the north of the Yakut territory, where the wealthy Tungus harness their reindeer to sledges and engage in transportation, a driving-reindeer is valued at from twelve to fifteen rubles. A Yakut draught-reindeer is valued still higher. On the Yana River and at the mouth of the Lena River, a good Yakut draught-reindeer is prized at twenty-five rubles. Not far from Verkhoyansk my dog frightened a team of harnessed post-reindeer. They started off, ran into a tree, and one of them broke its leg. It had to be killed; and by agreement with its owner, I paid him half of the cost of the reindeer, namely, twelve rubles. Since the Yakut will not kill their reindeer, they buy the skins of Chukchee reindeer or of wild reindeer for clothing. Not infrequently Yakut reindeer-herdsmen may be seen dressed in coats made of skins of musk-deer (*Moschus moschiferus*) or mountain-sheep, or of skins of calves of cows, lined with the fur of hares. 233 171 435 437

A reindeer-herd multiplies very quickly under favorable conditions. Starting with a herd of a hundred females in the second year of their life, when they just begin to breed,[2] and assuming that they, as well as their female offspring, will continue to produce one fawn each per year for the following ten years,[3] and, further, that the number of bucks and does born each year will be the same, we find that in the eleventh year the original herd of a hundred females would have grown to a herd of 11,420 head (5760 does, 5660 bucks). From this calculation it may be seen with what rapidity a reindeer-herd would multiply if its growth were not moderated by mortality among the fawns, by slaughter for meat and skins, and, above all, by epidemics. Barren does are so few, and stillbirths so rare, that these two factors need not be taken into account. 233 433

Of the annual offspring, the wealthy Koryak kill about half for meat

[1] A brick of tea usually weighs two and a half Russian pounds (one kilo); but some bricks weigh two pounds, and others two pounds and three-quarters.

[2] Quite often rut sets in among the does the first autumn after their birth, and they become pregnant.

[3] The average life of a reindeer is fifteen years, and the does bear until the end of their lives. Cases of the birth of twins are not rare.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

489 231 or hummocky ice, driving, even with good dogs, is considerably slower, because the sledge sinks into the snow, or on account of the necessity of clearing obstacles.

435 489 The value of an ordinary Koryak dog ranges from 8 to 12 rubles. A "leader" costs 15 rubles. A particularly bright "leader" costs from 20 to 25 rubles.

494 The fee for carrying freight is usually 1 ruble per pud (36 pounds) for 100 versts (66 miles); but merchants pay less, particularly to Koryak drivers, — 2.50 rubles or 2 rubles for a whole sledge-load of 5 pud.

A passenger-sledge (counting, of course, a single passenger only) costs 3 kopeks per verst, or 3 rubles per 100 versts, at the mail-carrier's rate, which has been established by the government. I usually paid 10 rubles per driving-sledge for such distances as Paren-Gishiga or Paren-Kamenskoye, approximately 150 and 200 versts (100 and 132 miles); but for long distances, without relay of dogs, the fee is lower. Thus from Gishiginsk to Anadyr (a distance of some 800 versts, or 530 miles) a sledge for a trip one way costs 25 rubles.

I: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY 4

good hunters, or families to which several hunters belong, can keep boats. Every year the cover of the skin boat requires mending, and must be replaced in parts. A large boat requires from fifteen to twenty seal-skins, each of which has a market-value of from five to six rubles. The ratio of the number of families possessing a skin boat to the number of those without one is not the same everywhere. For instance, on the Itkana, out of seventeen families, eight had no boats; while in Kamenskoye out of thirty, nine had none. The hunters of families without boats go hunting with the owners of boats, and then share the game with them.[1]

Kayaks. — Small skin boats for one man are made by the Koryak of Penshina Bay. They are of the kayak type, like those of the Aleuts and of the Eskimo from Greenland to Alaska. Mr. Bogoras says that kayaks are unknown among the Chukchee on the coast of the Pacific Ocean.[2] The Koryak kayak (mă'to) differs from that of the western Eskimo in some respects. It is shorter; the round manhole is not covered, and occupies the entire width; and prow and stern are of the same shape (Fig. 83). The skeleton of the

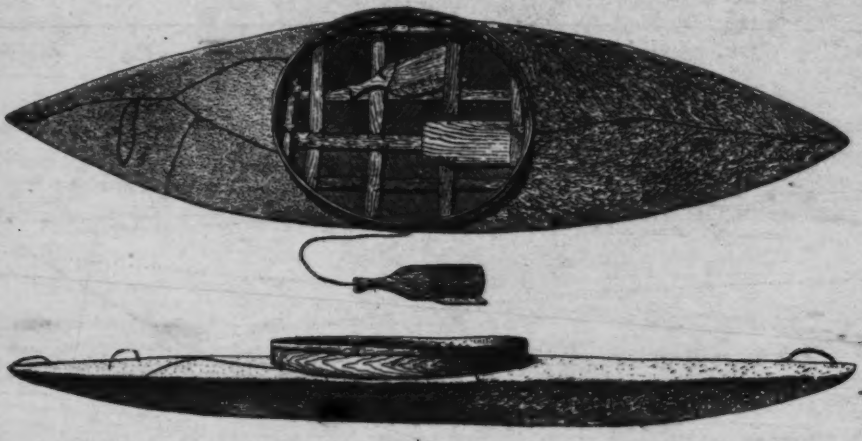

Fig 83 ($\frac{1}{11}\frac{1}{12}$). Kayak, Top and Side View. Length, 269 cm.; width, 75 cm.; height, 38 cm.; weight, 32 lbs.

kayak is made as follows: A strip of wood curved upward somewhat both fore and aft serves as the "keel." To both ends of the keel the ends of curved poles, which serve as rails, are tied with thongs. As the keel is curved in a vertical plane, with its convex side downward, while both rails are in a horizontal plane, the rails lie on a level with the keel only at their points of junction, while at all other points the rails lie higher than the keel. For

[1] See Chapter XIII.

[2] See Bogoras, The Chukchee, Vol. VII of this series, p. 126.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

EXPORTS FROM GISHIGINSK AND BARON KORFF'S BAY.

439 435

		Total Cost.	Average Cost.	
		Rubles.	*Rubles.*	*Kopeks.*[1]
1.	Sables (85 skins)	1825	21	47
2.	Red foxes (1743 skins)	8460	4	86
3.	Gray foxes (122 skins)	1524	12	49
4.	White Arctic foxes, adults (525 skins)	1535	2	92
5.	White Arctic foxes, cubs (332 skins)	347	1	4
6.	Blue Arctic foxes (4 skins)	48	12	—
7.	Pom-paws (1350 pieces)	338	—	21
8.	Squirrels (28,230 skins)	5635	—	20
9.	Squirrel-tails (6 pounds)	18	3	—
10.	Black bears (380 skins)	4848	12	76
11.	White bears (4 skins)	200	50	—
12.	Wolves (120 skins)	576	4	60
13.	Otters (14 skins)	150	10	71
14.	Beavers (69 skins)[2]	957	13	90
15.	Ermines (124 skins)	24	—	19
16.	Marmots (105 skins)	78	—	74
17.	Spring fawn-skins (1810)	7694	—	42
18.	Fall fawn-skins (10,520)	15370	1	46
19.	Summer skins (1350)	930	—	69
20.	Winter skins of adult reindeer (650)	456	—	70
21.	Dressed reindeer-skins (1555)	1555	1	—
22.	Reindeer-feet skins (3000 pieces)	150	—	5
23.	Rugs of Reindeer-fur (10 pieces)	140	14	—
24.	Coats of reindeer-fur (76)	650	8	55
25.	Coats of reindeer-leather (41)	123	3	—
26.	Gloves of reindeer-leather (22 pairs)	22	1	—
27.	Boots of reindeer-fur (254 pieces)	708	2	9
28.	Spotted-seal skins (98 pieces)	147	1	50
29.	Thong-seal thongs (1450 sashen[3])	145	—	10
30.	Whalebone (82 puds[4])	328	4	—
31.	Walrus-tusks (25 puds[4])	620	24	80
32.	Mammoth-bone (25 puds)	500	20	—
	Total exports	56,831 rubles.		

[1] A kopek is equivalent to about half a cent.

[2] Beavers are not found in northeastern Siberia. Those exported were skins of *Castor canadensis*, and of American origin. The Chukchee near Bering Strait acquire them from the American Eskimo through barter, and sell them to the Russian traders of the Kolyma, Anadyr, and Gishiga districts.

[3] Sashen (саженъ) is equivalent to 7 feet.

[4] A pud is equivalent to 40 Russian or 36 English pounds.

1: Jochelson E-5 (1900-01) 1908 RY4KoryakRY4

reindeer which were roaming near the tents of the Reindeer Koryak on the other bank. Early in the morning the Maritime Koryak would start crossing the river to the Reindeer Koryak and the Russian merchants, and back to their own camp. The skins of foxes and other animals were procured from the bosom, or brought in bundles, and offered to the merchants in exchange for goods. The merchants sold knives and spears. During the first two days the Reindeer Koryak made offerings of reindeer to the owner of the place and to other deities.[1] On the last day, when the camp was deserted, all that was left were heaps of antlers of the killed reindeer, and traces of the numerous fires. Plate XXIV, Fig. 2, represents the train of a Reindeer Koryak after the close of the fair, ready to leave the deserted camp.

Units and Prices. — The average prices which I gave for the export goods in the above list are the prices made by the merchants for the trading-companies in Vladivostok, to which place the goods were sent. The actual cost of these goods to the merchants is determined by the value attached to the articles received in exchange. These values, as will be seen later, vary greatly. When the petty traders sell fur skins to the merchants for cash, the skins are rated at approximately the prices given in the list. Thus, for example, a red fox varies in price between 4 and 5 rubles; a gray fox, between 12 and 13 rubles. Squirrels, the exchange units of the Tungus, are rated at 20 kopeks apiece; a reindeer-skin, at 1 ruble; and a dressed skin of a grown reindeer-calf, at 1 ruble 50 kopeks; and so on. Koryak who come to Gishiginsk in the winter also sell fur skins for cash, to pay the tribute, and to make purchases at the official store. As a rule, however, trade is still carried on by barter; and the valuation of the import articles by the merchants depends on the locality where the exchange is expected to take place. The farther from Gishiginsk it is, the higher become the prices of the articles. A brick of tea, for instance, — which is one of the most common units, and weighs about 1.5 pounds, — represents at Gishiginsk the value of 50 kopeks; but, as one proceeds away from Gishiginsk to the interior, its price gradually increases up to 2 rubles. At Vladivostok, on the other hand, a brick cost, during my stay there, 30 kopeks. Another important exchange unit, a package of tobacco-leaves, weighing 2 pounds or slightly above that, and rated in Gishiginsk at 60 kopeks, also reaches the price of 2 rubles. Besides, the merchants do some cheating. For instance, special orders are placed with Chinese plantations for bricks of smaller weight than the normal, and tobacco-packages are untied and three are made out of two; the stems of the tobacco-leaves are soaked in water, which is absorbed by the tobacco, thus increasing the weight of the package. Iron and brass ware is sold by the pound, and is rated, iron at from 30 kopeks to 1 ruble; brass,

[1] See Part I, p. 96.

k:Jochelson E-5 (1900-01)1908 RY4 Koryak RY4

435 at from 50 kopeks to 2 rubles. The result of this system is, that for a brick of tea one can get one reindeer-skin in some localities, and four reindeer-
437 skins in others.

177 For 5 arshin[1] of calico for a shirt, one can get one or two reindeer-skins. Some Cossack traders, profiting by the love of the Reindeer Koryak for gay colors, manufacture small wooden boxes, paint them with colors, or cover them with red cloth, and exchange them for foxes or other furs. Of course, only Reindeer Koryak of distant localities can be caught by such devices. Koryak women give reindeer-skins, bags of seal-skin, small rugs, and other products, in exchange for glass beads, ear-rings, bracelets, brass buttons, and other ornaments. Sugar is the favorite exchange article. During the winter the Reindeer Koryak store away the tongues of killed reindeer, and in spring deliver them to the merchants in exchange for sugar, one tongue being given for each piece. In general, sugar is the most mobile exchange article next to tea and tobacco.

452 Many Reindeer Koryak, as well as the trading Maritime Koryak, enjoy credit with the merchants, and settle their accounts semi-annually or anually with furs or reindeer-skins. On the whole, however, trade on credit is much less common with the Koryak than it is with the Tungus or the Yakut.

436 Notwithstanding the exchange character of their trade, the Koryak, even in the remotest regions, know Russian money. In the places nearest to Russian settlements the Koryak prefer money to exchange articles in trading-transactions, and also as compensation for services rendered, for with money they can make purchases at the Government store.

Curiously enough, the Russian monetary unit, the ruble, has among the Koryak the same name as iron, *polou'nto;* a paper ruble is called keli'tul polou'nto (that is, "painted iron"); while a silver ruble, as well as silver itself, is called ñaña-polou'nto ("current iron").

487 Routes. — I have spoken of the means of transportation in several chapters. As to routes, there are none in those localities where the Reindeer Koryak wander with their herds. The Reindeer Koryak, in their wanderings, follow the currents of rivers or streams. From the valleys of the rivers they ascend to the pasture-land of the elevated treeless tundras, or cross over the mountain-ranges to other valleys.

487 The Maritime Koryak, in their winter travels with dogs, follow definite routes. From Itkana one route leads to Gishiginsk, another to Paren. From
205 Gishiginsk the route leads over Paren, Kuel, Mikino, and Shestakovo (Egač), to Kamenskoye. Between Shestakovo and Kamenskoye, the route branches off to the north, by way of the Penshinsk settlement, to Markova on the Anadyr; and from Kamenskoye one route leads to Palpal, another to Talovka. From

[1] An arshin is equivalent to 0.778 of an English yard.